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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,016	07/14/2003	Jack A. Zeineh	10225-128001	8634

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EXAMINER	
SMITH, CAROLYN L	

ART UNIT	PAPER NUMBER
1631	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/620,016	ZEINEH ET AL.	
	Examiner	Art Unit	
	Carolyn L. Smith	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *36-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36-43* is/are rejected.

7)☒ Claim(s) *39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission, filed 8/20/07, has been entered.

Amended claims 36 and 37 and new claims 38-43, filed 8/20/07, are acknowledged.

Claims herein under examination are 36-43.

Claim Objections

Claim 39 is objected to because of the following informality: Claim 39 depends from itself which is improper. Appropriate correction is required.

Claim Rejections - 35 USC § 112, Second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 36-43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 recites "enabling simultaneous viewing of said virtual and real images on a screen" which is vague and indefinite. Viewing images on a screen makes these images

"virtual", by definition. Therefore, it is unclear what the difference is between "virtual and real images" since they are both "on the screen" and are therefore both virtual. Clarification of this issue via clearer claim wording is requested. Claims 37-43 are also rejected due to their dependency from claim 36.

Claim 38 recites "said virtual image is compressed" which lacks clarity. Since the verb is recited in the passive tense, it is unclear whether the limitation is intended to be an actual method step, is an intended result, or is merely some limitation of the image. Applicant is reminded that any method steps must be clearly recited in active, positive language. Clarification of this issue via clearer claim wording is requested. Claims 40-41 are also rejected due to their dependency from claim 38.

Claim 39 recites the limitation "the region of interest" in line. There is insufficient antecedent basis for this limitation in the claim as there is no previous mention of a region of interest. Clarification of this issue via clearer claim wording is requested.

Prior art

It is noted that the images of "virtual and real images on a screen" as recited in claim 36 are both interpreted to be "virtual" images on a screen (see 35 USC 112, 2nd paragraph rejection above).

Claim Rejections – 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 36 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Weissman et al. (US 5,602,674) with support from Merriam-Webster online dictionary ("remote" definition).

Weissman et al. disclose a method of providing a slide with a pathological specimen to be viewed (slide 5b of Figure 1) on a microscope slide stage (col. 3, lines 62-63; col. 5, lines 34-40; col. 9 line 64 to col. 10, line 2) which represents providing a real microscope slide. Weissman et al. disclose a computerized slide image (200 in Figure 3) on a screen (9 on Figure 2) showing representations of areas initially scanned (col. 10, lines 16-17) which represents providing a virtual slide formed of a virtual image of a real microscope slide. Weissman et al. disclose using computers to record slide data and superimposing computer output display on a microscope field for viewing by the user (col. 2, lines 13-17) and an encoder device comprising a computer and viewing screen (claim 1) which represents simultaneous viewing of virtual and real images on a

screen. Weissman et al. disclose a position encoder is affixed to the slide stage with the motion sequence connected to the computer to convert signals on the computer display screen (9) cursor position "+" in Figure 2 (col. 10, lines 10-15) which represents automatically and sequentially shifting regions of images. Weissman et al. disclose moving the stage linked with the computer to record and store motion and various viewing locations with indicia, such as black dots, correlating to the microscope viewing area location on the specimen as well as marking "indicia of interest" for subsequent retrieval (col. 5, lines 41-59 and col. 2, lines 45-52) wherein the correlated dot locations represent a seamless view and the subsequent retrieval of "indicia of interest" represent an optimal (most desirable) image. Weissman et al. disclose the image of Figure 3a is indicative of up-down scanning and overlapping patterns wherein white areas (201) indicate portions not scanned which may constitute portions not covered by the specimen (col. 10, lines 16-22) which represents overlapping regions of images from slides. Weissman et al. disclose monitoring specimens with a viewing screen on a computer device and operators screening in overlapping regions or columns (col. 3, lines 54-55 and col. 5, lines 6-15) and computing the percentage of overlapping fields (col. 4, lines 28-30) which represents overlapping images. Weissman et al. disclose moving in an up-down direction for focus and then moving in an x-y direction during operation (col. 10, lines 2-9) which represents automatically and sequentially shifting regions to obtain an optimal image. Weissman et al. disclose during subsequent reexamination of a specimen slide, a specimen is placed on a microscope stage and then previously recorded image slide is recovered wherein the cursor on the viewing screen of the representative slide image provides a continual correlation of position to the actual original microscope viewing area (col. 2, lines 59-63 and col. 6, lines 1-13) wherein

the reexamining represents simultaneous viewing of remote microscope images ["remote" defined as separated by an interval, such as time, according to the Merriam-Webster online dictionary] and overlapping between the original virtual and subsequent real viewing images. Weissman et al. disclose automated screening devices providing moving stages and a computer that is instructed to and generates time controlled markings (col. 1, lines 61-67 and col. 2, lines 53-56). Weissman et al. disclose density variations and using variations of a grayscale at each location on the image from a range wherein darker gray means overlapping screening and lighter gray areas mean less overlapping (col. 4, lines 15-34; col. 5, lines 12-15; col. 6, lines 14-20; and col. 7, line 46 to col. 8, line 23) which represents multiple compression levels (i.e. variations in reduced quantity or volume of grayness), as stated in instant claim 37.
Thus, Weissman et al. anticipate the instant invention.

Applicant argues that Weissman et al. do not anticipate the limitations of claim 36. This statement is found unpersuasive as Weissman et al. disclose the limitations as discussed above in the rejection. It is noted that the phrase "virtual and real images on a screen" can be interpreted to be images that are both virtual (see 35 USC 112, 2nd paragraph rejection above).

Claims 36 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Kamentsky et al. (US 5,793,969).

Kamentsky et al. disclose a method for network reviewing of a specimen slide (col. 2, lines 54-55). Kamentsky et al. disclose a system for review and analysis of computer encoded

microscope slides and specimens originally encoded from a microscope that is retrievable at all remote locations of a network and for comparing an original slide being examined (=real) or scanned image of slide that is stored (=virtual) with on-line library cell type images (=virtual) (abstract) which represents simultaneous viewing microscope images comprising virtual and real images as well as providing virtual and real microscope slides. Kamentsky et al. disclose determining whether there was overlapping of viewing (col. 1, lines 31-33). Kamentsky et al. disclose multiple simultaneous reviews of encoded information obtained from slide analysis procedures of a microscope slide including stored images of the slide (col. 2, lines 11-16). Kamentsky et al. disclose providing automatic location and review of flagged slide specimen view sites (col. 2, lines 30-32). Kamentsky et al. disclose moving the slide stage with a specimen slide that is operatively linked to computer means to correlate movement and record locations pursuant to automatic programmed instructions (col. 2, line 61 to col. 3, line 13). Kamentsky et al. disclose network reviewing of a specimen slide that was previously examined with computer encoded movement including correlated recorded markings with areas of interest that are recalled in a computer generated image of the slide (col. 3, lines 24-67) and then placing the specimen slide on the moveable slide stage and moving the stage in correlation with viewing areas with indicia markings on the computer generated image (col. 4, lines 1-14) which represents automatic and sequential shifting regions. Kamentsky et al. disclose marking areas of interest (col. 1, lines 57-65) and moving the stage containing the slide specimen to areas with correlated indicia of the computer generated image having a distinguished marking in order to be directly viewed with the microscope (col. 4, lines 9-14 and col. 9, lines 62-63) which represents shifting and overlapping (correlated) regions to obtain an optimal (desirable) image. Kamentsky

et al. disclose relocating slide images at designated sites via a motor driven microscope with computer control (col. 5, lines 35-37 and col. 10, lines 6-10) which represents automatic and sequential shifting of images. Kamentsky et al. disclose using grayscale display information with variations in shades of gray and degrees of overlap (claim 4) and viewing slides or images of slides only at areas of interest (claim 13) which represents multiple compression levels (i.e. variations in reduced quantity or volume of grayness), as stated in instant claim 37.
Thus, Kamentsky et al. anticipate the instant invention.

Applicant did not provide any arguments with regard to the Kamentsky et al. prior art reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamentsky et al. (US 5,793,969) in view of Silverbrook (US 5,329,616).

Kamentsky et al. describe the limitations of instant claims 36 and 37 as described in the 35 USC 102 rejection above. Kamentsky et al. describe transmitting a region of interest to a user (Kamensky et al.: col. 9, second paragraph and last paragraph), as stated in instant claims 39, 41,

and 43. Kamentsky et al. do not describe compressing a virtual image, selecting and decompressing a portion of the image (claim 38), recompressing the region of interest (claim 40), and image comprised of a plurality of compressed images and creating a region of interest including selecting and decompressing a portion of one or more compressed images (claim 42).

Silverbrook describes compressing a virtual image, selecting and decompressing a portion of the image (abstract; col. 3, paragraph 6; claim 1), recompressing the region of interest (col. 6, paragraph 4), and image comprised of a plurality of compressed images and creating a region of interest including selecting and decompressing a portion of one or more compressed images (abstract; col. 3, paragraph 6; col. 2, line 50 to col. 3, line 68; claims 1, 14-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to compress and decompress the virtual image as taught by Silverbrook in the method of Kamentsky et al. where the motivation would have been to alleviate the need for large image stores and therefore avoid the problems of cost and time since full color graphic images require massive amounts of data, as stated by Silverbrook (col. 1, lines 9-20 and col. 2, third paragraph).

Thus, Kamentsky et al. in view of Silverbrook make obvious the instant invention.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform to the notices published in the Official Gazette, 1096 OG 30

(November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran, can be reached on (571) 272-0720.

October 9, 2007

/Carolyn Smith/
Primary Examiner
AU 1631